

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:  
Kazuhito Kojima et al.

Application No.: 10/606,184

Confirmation No.: 1598

Filed: June 26, 2003

Art Unit: 2166

For: DATABASE SYSTEM AND A METHOD OF  
DATA RETRIEVAL FROM THE SYSTEM

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Examiner: S. F. Lin

**RESPONSE TO NON-COMPLIANT AMENDMENT**

**MS Appeal Brief** - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In response to the Notice of Non-Compliant Amendment, applicant submits the attached revision of Section V of the previous file Appeal Brief.

## V. SUMMARY OF CLAIMED SUBJECT MATTER

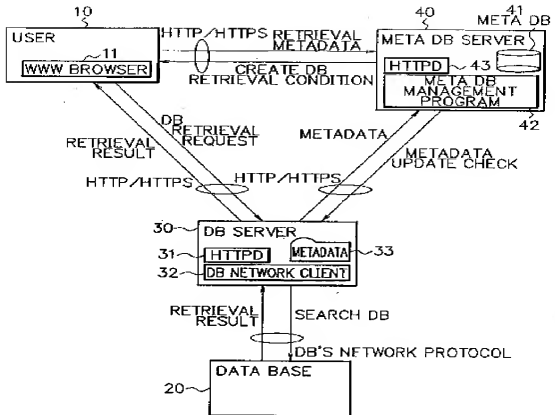
Kojima et al. discloses a method of data retrieval using metadata, pertaining to real data stored in at least one database (DB) , that is collected and managed in a single meta DB server, wherein the metadata that match a retrieval request are extracted by searching of the meta DB server and bypassing the server of the at least one database.<sup>1</sup> In particular, as shown in **FIG. 2** below, Kojima et al. discloses a user terminal **10** that inputs a keyword for search, issues a retrieval request, displays a retrieval result; a database (DB) **20** which stores actual data; a DB server **30** further comprising a retrieval request receiving module **31**, a retrieval executing module **32**; and a DB network client **32**; and a meta DB server **40**.<sup>2</sup>

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<sup>1</sup> U.S. Patent Publication No. US 2004/0010493 at **ABSTRACT** and claims.

<sup>2</sup> *Id.* at FIG. 2, paragraphs [0069] to [0073].

FIG. 2



Further, FIG. 4 of Kojima et al. discloses the method of data retrieval of claims 1 and 9 comprising a series of search processes in correspondence with the user terminal 10, data base (DB) 20, DB server 30, and meta DB server 40. In particular, the flow chart of FIG. 4 of Kojima et al. discloses the administrator of the DB server 30 creates and registers/saves metadata 33 that pertain to the DB 20 in step S1 of FIG. 4.<sup>3</sup> These metadata 33 can be looked up from other machines on the network 50 via the HTTPD 31 on the DB server 30. In step S2 of FIG. 4, the administrator of the meta DB server 40 registers information required for acquiring/collecting metadata 33 from the DB servers 30. After information of each DB 20 to be supported is registered, the meta DB server 40 acquires metadata 33 pertaining to the registered DBS 20 for the DB servers 30 in step S3 of FIG. 4, and registers the acquired metadata 33 in the meta DB 41 in step S4.<sup>4</sup> When a

<sup>3</sup> Specification at **FIG. 4**, page 25, lines 23-27.

<sup>4</sup> Specification at **FIG. 4**, page 26, lines 3-27.

search is made, the user inquires of the meta DB server 40 using a World Wide Web browser in step S5 of FIG. 4 and the meta DB server 40 searches for DBS 20 that matches the user's inquiry using the meta DB 41 in step S6 of FIG. 4.<sup>5</sup> In step S7 of FIG. 4, a retrieval condition creation form page (GUI control window) is formed using the retrieval result and metadata and sends it to the user terminal 10.<sup>6</sup> In step S8 of FIG. 4, the user checks if the retrieval result is satisfactory and if not, returns to step S5 of FIG. 4.<sup>7</sup> If satisfactory, the flow advances to step S9 of FIG. 4, where the user creates a retrieval condition used for retrieving real data from the extracted DB 20 using the presented retrieval condition and issues it as a retrieval request to the DB server 30.<sup>8</sup> Upon receiving the retrieval request, the DB server 30 translates the retrieval request into a format that matches the DB 20 in step S10 of FIG. 4.<sup>9</sup> Upon reception of the translated retrieval request, the DB server 30 issues a retrieval request to the DB 20 in place of the user to search and retrieve real data in step S11 of FIG. 4.<sup>10</sup> The retrieval result is sent back to the user terminal 10 and displayed in step S12 of FIG. 4.<sup>11</sup>

Thus, with support of the above disclosure, Kojima et al. claims, as recited in independent claim 1 and similarly in independent claim 9:

[A] method of data retrieval by a user from a distributed database, comprising:  
    *saving metadata* pertaining to real data stored in databases distributed on a network in first servers distributed on the network associated with each of said databases;  
    *collecting metadata* saved in said first servers and storing said metadata in a metadata database of a second server without storing the real data represented by said metadata;  
    *extracting metadata* that matches a user retrieval request from a user terminal by searching metadata stored in said metadata database, and transmitting a retrieval result

<sup>5</sup> Specification at FIG. 4, page 27, lines 1-12.

<sup>6</sup> Specification at FIG. 4, page 27, lines 13-18.

<sup>7</sup> Specification at FIG. 4, page 27, lines 19-27.

<sup>8</sup> Specification at FIG. 4, page 27, lines 19-27.

<sup>9</sup> Specification at FIG. 4, page 28, lines 1-12.

<sup>10</sup> Specification at FIG. 4, page 28, lines 1-20.

<sup>11</sup> Specification at FIG. 4, page 27, lines 10-30.

including information of a location of the first server *saving the metadata that matches said user retrieval request*, to said user terminal;

inputting a real data retrieval condition for the database on the basis of the retrieval result of the metadata database transmitted to said user terminal;

issuing a real data retrieval condition from said user terminal to the first server on the basis of said information of a location of the first server,

*wherein said real data retrieval condition is issued to said first server by bypassing said second server; and*

*retrieving, by the first server, the real data from the corresponding database after converting said real data retrieval condition into a format which is concordant with the database (emphasis added).*

### **Conclusion**

If a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 21776-00033-US1 from which the undersigned is authorized to draw.

Dated: December 27, 2007

Respectfully submitted,

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